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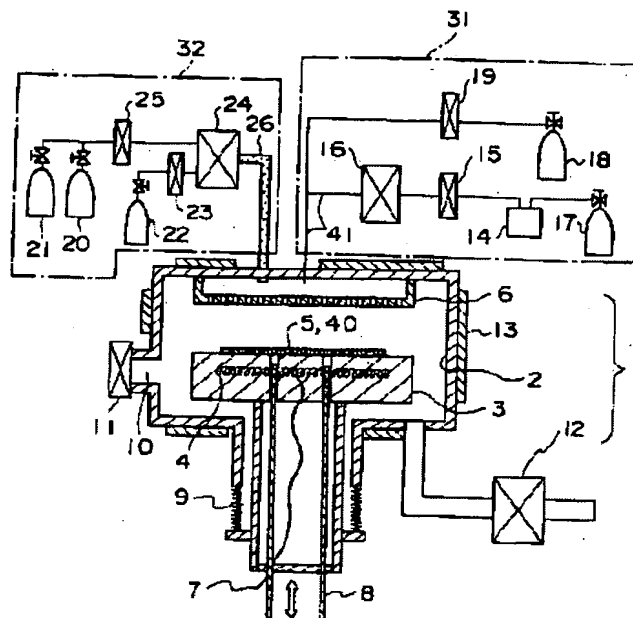
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INVENTOR : ASAI MASAYUKI;

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TITLE : CVD SYSTEM AND CLEANING METHOD THEREFOR



1 : 反応室 2 : 内壁面 3 : サセブタ 5 : S i ウエハ 12 : 真空ポンプ
14 : 液体原料 15 : 液体マスフローコントローラ 16 : 気化器
17 : Heガス 18 : O₂ガス 19, 23, 25 : マスフローコントローラ
20 : Cl₂ガス 21 : H₂ガス 22 : Arガス 24 : リモートプラズマ源
28 : クリーニングガス供給配管 31 : 原料ガス供給部
32 : クリーニングガス供給部 40 : カバーウエハ 41 : 配管

ABSTRACT : PROBLEM TO BE SOLVED: To provide a CVD systems for efficiently removing Ti oxide, Zr oxide, Hf oxide, which are deposited on the inner wall face of a reaction chamber or the composite film of them, and to provide a cleaning method.

SOLUTION: In a cleaning gas supply part 32, chlorine gas containing chlorine, such as Cl₂, BCl₃, HCl, ClF₃ and ClF, is activated and is introduced into the reaction chamber 1. A deposited film is gasified and is removed. Since foreign matters attached to a wafer can be reduced by efficiently removing the deposited film on the inner wall face 2 of the reaction chamber 1, device stop time can be shortened and device operation rate is improved.

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